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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
PATENT OPERATIONS

Art Unit: 2631  
Applicants: Geiger et al.  
Serial No: 10/636,149  
Filed: August 7, 203  
Title: DEVICE AND METHOD FOR SCALABLE CODING AND DEVICE AND  
METHOD FOR SCALABLE DECODER


Charlotte, North Carolina  
May 24, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

**CERTIFICATE OF MAILING**

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: May 24, 2005.

  
\_\_\_\_\_  
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\_\_\_\_\_  
May 24, 2005

Date

Docket 3827



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Charlotte, North Carolina  
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Alexandria, VA 22313-1450

**SUBMISSION OF MISSING DOCUMENT**

Sir:

Please enter into the file of the subject application the following enclosed document:

1. English translation of the International Preliminary Examination Report.

Respectfully submitted,

Customer Number  
22474

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Docket 3827

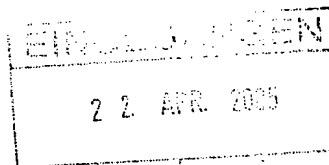
From the INTERNATIONAL BUREAU

**PCT**

**NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT  
(PCT Rule 72.2)**

To:

SCHOPPE, Fritz  
Schoppe, Zimmermann, Stöckeler & Zinkler  
Postfach 246  
82043 Pullach bei München  
ALLEMAGNE



Date of mailing (*day/month/year*)  
14 April 2005 (14.04.2005)

Applicant's or agent's file reference  
FH030801PCT

**IMPORTANT NOTIFICATION**

International application No.  
PCT/EP2003/008623

International filing date (*day/month/year*)  
04 August 2003 (04.08.2003)

Applicant

FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V. et al

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

AZ, CA, CH, CN, CO, GH, KG, KP, KR, MK, MZ, RU, TM

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, BA, BB, BG, BR, BY, BZ, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EP, ES, FI, GB, GD, GE, GM, HR, HU, ID, IL, IN, IS, JP, KE, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MN, MW, MX, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SY, TJ, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

**It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.**

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Ellen Moyse

Facsimile No.+41 22 740 14 35

Facsimile No.+41 22 338 89 75

Translation

PATENT COOPERATION TREATY

PCT/EP2003/008623



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FH030801PCT	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/008623	International filing date (day/month/year) 04 August 2003 (04.08.2003)	Priority date (day/month/year) 09 August 2002 (09.08.2002)
International Patent Classification (IPC) or national classification and IPC G10L 19/02		
Applicant FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 09 March 2004 (09.03.2004)	Date of completion of this report 02 June 2004 (02.06.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP2003/008623

## I. Basis of the report

### 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
 pages \_\_\_\_\_ 1-5 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
 pages \_\_\_\_\_ 1-21 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, as amended (together with any statement under Article 19  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the drawings:  
 pages \_\_\_\_\_ 1/9-9/9 \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
 pages \_\_\_\_\_, as originally filed  
 pages \_\_\_\_\_, filed with the demand  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

### 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

### 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

### 4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

### 5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 03/08623

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1-21	YES
	Claims		NO
Inventive step (IS)	Claims	1-21	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims		NO

### 2. Citations and explanations

Reference is made to the following document:

D1: A scalable subband audio coding scheme for ATM environments, by Wen Jin et al.

Document D1, which is considered to be the prior art closest to the subject matter of claim 1, discloses a device for scalable coding of a spectrum of a signal that includes audio information, the spectrum having binary spectral values; the audio signal is coded in a plurality of scaling layers, and the scaling layers can be decoded separately (see section III).

The subject matter of claim 1 differs from the known device in that it generates at least two scaling sub-layers for the coding of the audio or video signal.

The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

Thus the problem addressed by the present invention is that of devising a scalable coding method that can be used to achieve finer scalability.

The problem is solved by the feature specified in claim 1 whereby the signal is coded in a plurality of scaling layers (see claim 1, lines 8 to 32).

The solution proposed in claim 1 involves an inventive step (PCT Article 33(3)) because none of the prior art documents suggest coding an audio and/or video signal in scaling sub-layers.

Claims 2 to 16 are dependent on claim 1 and therefore also meet the PCT requirements in respect of novelty and inventive step.

Claim 17 relates to a device for scalable decoding. The features correspond to those of claim 1, and therefore claim 17 also meets the PCT requirements in respect of novelty and inventive step.

Claim 18 is dependent on claim 17 and therefore also meets the PCT requirements in respect of novelty and inventive step.

Claim 19 relates to a method for scalable coding. The features correspond to those of claim 1, and therefore claim 19 also meets the PCT requirements in respect of novelty and inventive step.

Claim 20 relates to a method for scalable decoding. The features correspond to those of claim 1, and therefore claim 20 also meets the PCT requirements in respect of novelty and inventive step.

Claim 21 relates to a computer program with a program code for carrying out the methods of claim 19 and 20. Claim 21 therefore also meets the PCT requirements in respect of novelty and inventive step.